



[3410-11-P]

DEPARTMENT OF AGRICULTURE

Forest Service

Environmental Impact Statement for the Power Fire, Eldorado National Forest

AGENCY: Forest Service, USDA.

ACTION: Notice of intent to prepare an environmental impact statement.

SUMMARY: The Eldorado National Forest will prepare an environmental impact statement (EIS) to reforest portions of the Power Fire as well as manage existing plantations within the Power Fire. The EIS will analyze planting of small trees, mechanical and chemical site preparation for planting, mechanical and chemical removal of competing vegetation, control of invasive plant species, and oak stand improvement.

DATES: Comments concerning the scope of the analysis must be received by June 6, 2014, 30 days from date of publication in the Federal Register. The draft environmental impact statement is expected in July 2014 and the final environmental impact statement is expected in November 2014.

ADDRESSES: Send written comments to 100 Forth Road, Placerville, CA 95667. Comments may also be sent via e-mail to comments-pacificsouthwest-eldorado@fs.fed.us, or via facsimile to 530-621-5297.

FOR FURTHER INFORMATION CONTACT: Bob Carroll, 4260 Eight Mile Road, Camino, CA 95709, 530-647-5386.

Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 between 8 a.m. and 8 p.m., Eastern Time, Monday through Friday.

SUPPLEMENTARY INFORMATION:

Purpose and Need for Action

The purpose of this project is to move the project area more quickly toward desired future conditions for the land allocations within the fire area, as defined by the Sierra Nevada Forest Plan Amendment (SNFP). The desired conditions for land allocations of old forest emphasis, wildland

urban interface (defense and threat zones), protected activity centers (PAC) for spotted owls, and spotted owl home range core areas (HRCA) include:

Old Forest Emphasis: Tree sizes range from seedlings to very large diameter trees. Species composition varies by elevation, site productivity, and related environmental factors. Multi-tiered canopies, particularly in older forests, provide vertical heterogeneity. Dead trees, both standing and fallen, meet habitat needs of old-forest-associated species.

Defense Zone: Stands are fairly open and dominated primarily by larger, fire tolerant trees. Surface and ladder fuel conditions are such that crown fire ignition is highly unlikely. The openness and discontinuity of crown fuels, both horizontally and vertically, result in very low probability of sustained crown fire.

Threat Zone: Flame lengths less than four feet at the head of a fire, reductions in rate of spread and hazards to firefighters, and a doubling of fire line construction rates.

PAC: At least two tree canopy layers are present. Dominant and co-dominant trees average at least 24 inches dbh. Area within PAC has at least 60 to 70 percent canopy cover. Some very large snags are present (greater than 45 inches dbh). Levels of snags and down woody material are higher than average.

HRCA: Within home ranges, HRCAs consist of large habitat blocks having at least two tree canopy layers, at least 24 inches dbh in dominant and co-dominant trees, a number of very large (>45 inches dbh) old trees, at least 50-70% canopy cover, and higher than average levels of snags and down woody material.

There is a need to reestablish a forested landscape that is fire resilient.

One of the primary objectives of the Power Fire Reforestation Project is to move the project area from its existing condition, which is primarily early-seral conditions, toward the desired future conditions described above.

Historically, forests were resilient because they burned on a frequent basis (every 0-35 years) and were of low severity. Frequent burning in these forests regularly consumed fuels, killed small trees, and pruned the boles of residual trees, maintained a relatively fire-resistant landscape (Agee 2002).

To move the project area towards a frequent fire regime of a fire resilient forest requires the survival and growth of individual trees and forested stands for many years without the occurrence of stand replacing fires. Currently, trees are at high risk of fire-related mortality due to

their small size. Competing vegetation also greatly affects tree growth rates. Control of competing vegetation would increase conifer growth rates. Increased growth would accelerate the development of key habitat and old forest characteristics and reduce the risk of loss to wildland fire (SNFP ROD, page 49).

Tree mortality is also affected by both the intensity and size of wildfires that occur in the project area. Treatments that reduce fire intensity and rate of spread would reduce tree mortality in wildland fire conditions. Increased fire line production rates would limit the size of wildland fires in the area, further reducing tree mortality and allow trees to continue to accelerate their development of old forest conditions.

There is a distinct difference between the desired conditions for forested landscapes and the existing condition of vegetation within the project area. Based on this difference, there is a need to reestablish a forested landscape that is fire resilient.

There is a need to reestablish this forested landscape effectively and efficiently.

Logged units and pre-fire plantations have mostly been replanted and had brush and grass removed by hand at least once. Surveys show that some of these plantations have failed because the brush and grasses consumed the limited water and nutrients and the seedlings died. Tree survival and growth in the remainder of the plantations are at continued risk of mortality due to high levels of competing vegetation. Some logged areas have not been replanted due to rapid post-fire return of highly competitive vegetation. Competing vegetation could persist for the long term, negatively affecting both planted and natural seedling survival, inhibiting tree growth, and delaying the achievement of the desired conditions.

Currently the establishment of grasses, shrubs, and other vegetation, while variable, is approaching 100 percent cover over the project area. Establishment of greater than 30 percent cover of vegetation presents a potential lethal environment to the establishment of conifer seedlings. Currently 20 percent of the planted areas have failed. Examination of the planted areas in the project area indicates survival and growth are threatened by competing vegetation. Management of competing vegetation is essential to assure continued survival and growth of the remaining conifers seedlings and to allow planting in units currently understocked to meet desired future conditions for all of the land allocations.

There is a need to restore wildlife habitats and provide for the native plant and animal species associated with these ecosystems.

Nearly 50 percent of the Power Fire burned at high intensity, killing 75 to 100 percent of the trees. Another 13 percent burned at moderate intensity, killing 25 to 75 percent of the trees. In the high and moderate intensity areas the fire resulted in loss of old forest habitat for sensitive species. Some dead trees standing today may contribute to the decaying, fallen log component of future old forest and spotted owl habitat. Decomposing logs contribute to the structural complexity of old forests, provide habitat for old forest dependent wildlife species and their prey, and contribute to soil productivity.

A portion of the high and moderate intensity burned area (about 2,500 acres, 18 percent of the National Forest System lands within the fire area) has been planted with seedlings. Surveys show that over 20 percent of these plantations have failed. Competition with brush and grasses for the limited soil moisture during the dry summer months caused mortality and insufficient growth in the conifer seedlings. Tree survival and growth in the remainder of the plantations are at continued risk of mortality due to high levels of competing vegetation.

Desired conditions that apply to old forest emphasis areas include dead trees, both standing and fallen, that meet habitat needs of old-forest-associated species. In HRCAs and PACs desired conditions include some very large snags, and higher than average levels of snags and down woody material. Over the long term, desired conditions in PACs and HRCAs include areas of suitable habitat with large trees, and multi-layered, dense canopy cover. Long term desired conditions for old forest emphasis include high levels of structural diversity over large areas comprised of roughly even-aged vegetation groups, varying in size, species composition, and structure. Where possible, areas treated for fuels also provide for the successful establishment of early seral stage vegetation (SNFP ROD pg. 41).

There is a dramatic difference between the desired conditions and the existing condition of the project area. There is a need to restore/reestablish wildlife habitats and provide for species associated with these ecosystems.

There is a need to control or eliminate invasive species in the project area to reduce the potential for spread of invasive species to other areas in the forest.

The project area had documented invasive species infestations prior to the fire. They included yellow starthistle, French broom, skeletonweed, ripgut brome, cheatgrass, medusahead, Klamathweed, bull thistle, woolly mullein, and Himalayan blackberry. After the fire and salvage logging invasive species infestations have increased.

Goals (desired conditions) for noxious weed management are to manage weeds using an integrated weed management approach according to the

priority set forth in FSM 2902: Priority 1 – prevent the introduction of new invaders; Priority 2– conduct early treatment of new infestations; Priority 3 – contain and control established infestations; and Priority 4 – proactively manage aquatic and terrestrial areas of the National Forest to increase the ability of those areas to be self-sustaining and resistant to the establishment of invasive species (SNFP ROD, pg. 36 and FSM 2900). There is a need to control or eliminate invasive species in the project area to move the project area in a trajectory toward the desired condition.

Proposed Action

Hand planting and inter-planting would occur on approximately 1,580 acres. Inter-planting would occur on 500 acres within the 2,500 acres previously planted. Approximately 1,080 acres would be planted by hand using one of three tree planting arrangements. Additional acres would be inter-planted if monitoring shows desired stocking levels have not been met on any of the plantations.

Planting Arrangement A, designed to accelerate the development of old forest conditions without establishing dense, homogenous stands that are at greatest risk to loss in future fires, would plant trees in groups at a wide spacing. The prescription is also designed to allow for development of structural diversity and the inclusion of small openings and shrub habitats over the next several decades as planted areas grow into mature stands. This arrangement is intended to provide for an interspersed of habitats used by wildlife associated with early forest conditions and for development of heterogeneity in mature forest stands.

The following guidelines for planting would apply on 1,400 acres in areas outside of California spotted owl Protected Activity Centers, sensitive plant occurrences and potential habitat areas, deer critical winter range and riparian areas. Plant approximately 200 to 400 trees per acre by hand. Trees would be planted in groups of 2 to 4 trees with approximately 21 feet apart from the center of the clusters. Planting would be reduced on unproductive ridge tops.

Planting Arrangement B is designed to establish habitat suitable for California spotted owl nesting. Accelerating the development of dense, old forest conditions is the primary objective in these areas. Conifers would be planted at denser spacing to ensure sufficient survival for establishing dense canopied, old forest habitat in a relatively rapid timeframe.

The following guidelines for planting would apply in the approximately 125 acres that are within currently unsuitable habitat occurring in California spotted owl PACs. Plant approximately 300 to 350 trees per

acre by hand. Trees would be planted individually at a spacing of approximately 10 to 15 feet.

Planting Arrangement C is designed to accelerate development of more open forest conditions and provide shrub and oak habitats important for wildlife associated with early forest habitats. The Power Fire occurred within a State Game Refuge that includes critical deer winter range for the Salt Springs Deer Herd. This planting arrangement is intended to maintain high quality foraging within this area.

The following guidelines for planting would apply on 60 acres of critical deer winter range and a portion of the winter range and areas that are within sensitive plant occurrences and potential habitat. Plant 100 to 150 trees per acre in identified sensitive plant potential habitat areas and deer critical winter and winter range areas. Individual trees would be planted on 17 to 20 foot wide spacing.

Within all planting arrangements a mixture of conifer species (ponderosa pine, Jeffrey pine, sugar pine, Douglas fir, incense cedar, white fir, and red fir) would be planted depending on elevation and seedling availability. Planted seedlings would be grown from seed produced from Region 5 seed orchards or seed of local origin (collected within the same seed zone and 500 foot elevation band as the planting site). Seedlings grown from these sources would exhibit higher levels of genetic variability and broader adaptability. When unavailable, seed would be transferred in compliance with seed transfer rules based on California Tree Seed Zones (1971, J. Buck, et al) and in reference to R-5 Forest Service Handbook 2409.26, Section 42.2.

Inter-planting would be implemented where seedling mortality threatens plantation failure (less than 60 percent stocking at 100 trees per acre within planting Arrangements A and C or 60 percent stocking at 200 trees per acre within planting Arrangement B). Opportunities to provide patches of early seral vegetation less than one acre in size by limiting inter-planting on some sites with high seedling mortality would be evaluated.

Site preparation (mechanical and chemical) is proposed on approximately 1,080 acres. Mechanical methods include mastication and tractor piling and burning on approximately 610 acres. Chemical site preparation would involve ground application of glyphosate or aminopyralid/glyphosate on approximately 470 acres prior to planting. Prior to chemical application, brush may be cut on portions of units for access.

Chemical application would be restricted to ground-based methods. Colorants would be added to the herbicide mixtures to provide visibility for applicators to track coverage. Adjuvants would be added to herbicide mixtures to improve herbicide effectiveness. Herbicides proposed for use include glyphosate (Rodeo or equivalent), aminopyralid, clopyralid, and

triclopyr (Garlon 4 or equivalent). Additives proposed for use include surfactants (methyated seed oil, NPE-based, or a silicone/MSO blend) and a colorant or dye.

Release of conifer seedlings from competing vegetation would involve targeted area ground application of herbicide on approximately 3,025 acres. Prior to herbicide application, brush may be cut on portions of units for access. Follow-up herbicide applications would occur if monitoring results show competing vegetation (grasses and/or brush) is projected to exceed 40 percent ground cover of the plantation within 3 to 5 years of planting. The follow-up applications would include the following methods by vegetation type:

Completing Vegetation Type	Herbicide application method
Bearclover, grass	Targeted area ground application
Whitethorn, manzanita ground	First follow-up would be radial application
Deerbrush area	First follow-up would be targeted ground application and additional follow-up would be radial ground application

Herbicide applications would be excluded near streams and special aquatic features as described below:

Aquatic Feature Type	Herbicide Formulation	Distance (Feet)
Perennial Streams and Special Aquatic Features	Aminopyralid, triclopyr, clopyralid	100
	Glyphosate	50
	Aminopyralid, triclopyr,	

Intermittent Streams	clopyralid	100 if wet, 50 if dry
	Glyphosate	50 if wet, 25 if dry
Ephemeral Streams	Aminopyralid, triclopyr, clopyralid	50 if wet, 25 if dry
	Glyphosate	25 if wet, 10 if dry

Hand grubbing or cutting would be used to release conifer seedlings within exclusion zones and within approximately 500 acres of critical habitat for Sierra Nevada yellow legged frog.

Control of invasive plant species would follow integrated pest management principles including manual, mechanical, and chemical control methods. Chemical control methods may include directed foliar and radius application using clopyralid, aminopyralid, or glyphosate.

Oaks stand improvement would include oak pruning/thinning or fencing as needed to improve oak regeneration and growth within approximately 900 acres of deer winter range and critical winter range. Small conifer trees would be removed within 20 feet of existing oaks within the deer winter and critical winter ranges. Fencing would be used to protect individual oaks from deer and cattle browsing with small cages 2-4 feet in diameter or by fencing areas 1/4 acre to 2 acres in size.

Responsible Official

The Responsible Official is Laurence Crabtree, Forest Supervisor of the Eldorado National Forest.

Nature of Decision To Be Made

The Responsible Official may decide to implement the proposed action, take no action, or implement an alternative action.

Scoping Process

This notice of intent initiates the scoping process, which guides the development of the environmental impact statement. An open house will be held at the Amador District Office, 26820 Silver Drive, Pioneer, CA 95666, on Monday May 15, 2014 from 4:00 pm to 7:00 pm.

It is important that reviewers provide their comments at such times and in such manner that they are useful to the agency's preparation of the environmental impact statement. Therefore, comments should be provided prior to the close of the comment period and should clearly articulate the reviewer's concerns and contentions.

Comments received in response to this solicitation, including names and addresses of those who comment, will be part of the public record for this proposed action. Comments submitted anonymously will be accepted and considered, however.

Dated: April 23, 2014.

Laurence Crabtree,
Forest Supervisor,
Eldorado National Forest.

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